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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/020,130	12/18/2001	Takashi Mochizuki	Q67762	7342

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EXAMINER	
DEAN, RAYMOND S	
ART UNIT	**PAPER NUMBER**
2618	

DATE MAILED: 08/09/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/020,130	MOCHIZUKI, TAKASHI	
	Examiner	Art Unit	
	Raymond S. Dean	2618	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *30 May 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1 - 28* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1 - 28* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *18 December 2001* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on May 30, 2006 has been entered.

Response to Arguments

2. Applicant's arguments filed March 28, 2006 have been fully considered but they are not persuasive.

Examiner respectfully disagrees with Applicant's assertion on Page 16, 2nd Paragraph of the Remarks "Contrary to the Examiner's interpretation, Dabak does not suggest that the base stations that are not selected will necessarily ...". Dabak teaches a site selection scheme in which the data transmission from the non-selected base stations are terminated for the **next frame**, which means that during the following frames said non-selected base stations will start transmitting data again. The selection process repeats and another base station is selected with the non-selected base stations terminating data transmission for the next frame. The non-selected base

stations will transmit data again at a later point in time after a particular base station is selected thus giving rise to the need for the site selection process to be repeated.

Toskala further teaches a site selection method in which a plurality of base stations involved in soft handoff are transmitting on the Dedicated Physical Data Channel (DPDCH) prior to site selection. One of these base stations will be selected as the primary base station with the remaining base stations being non-primary (non-selected). In other words, the non-selected base stations will be transmitting on the DPDCH prior to site selection (See Toskala, Col. 10 lines 22 – 29, in order for the DPDCH to be switched off at site selection there must be transmission on the DPDCH prior to site selection). Toskala teaches a typical WCDMA system, which is a mobile radio system. The radio channels in mobile radio systems are subject to a myriad of corrupting factors such as noise, multipath fading, and interference from adjacent channel communications. These corrupting factors can corrupt data or information that is transmitted. Since Toskala teaches a typical mobile radio system the data transmitted in the Toskala system will be subject to the same corruption thus there will be scenarios in which data such as the cell ID information will be corrupted. If the cell ID is corrupted unintelligible information can be received by the base stations thus giving rise to a scenario where the non-selected base stations will continue transmitting on the DPDCH as opposed to terminating the transmission on the DPDCH. If, however, the cell ID is not corrupted the non-selected base stations will terminate their transmissions on the DPDCH. Toskala therefore teaches wherein said other base stations terminate transmission of user data to said mobile terminal if said identification,

which is transmitted by said mobile terminals is properly received at the other base stations, and said other base stations continue to transmit user data after said selecting of the first base station if said identification of the selected first base station transmitted by said mobile terminal is not properly received at the other base stations, wherein said other base stations transmit user data to said mobile terminal prior to the selecting of said first base station, and said other base stations do not properly receive said identification of the selected first base station and continue to transmit without terminating transmission of user data.

Examiner respectfully disagrees with Applicant's assertion on Page 18, 1st Paragraph "Toskala does not teach or suggest modifying the transmission power of the downlink signals ..." for the same reasons set forth in the Office Action dated December 30, 2005, "Response To Arguments", "Regarding Claims 1, 18". Toskala teaches a closed loop power control scheme during soft handoff which comprises the mobile sending TPC commands to the base stations involved in the soft handoff. The TPC commands are based on the measured power of the signals transmitted by said base stations. Toskala references 3G TS 25.214 v 3.1.1 (See Toskala, Col. 10 line 20), which teaches power control during soft handoff in sections 5.2.1.1 and 5.2.1.2).

Regarding Claim 6

Examiner respectfully disagrees with Applicant's assertion on Page 20, 3rd Paragraph "Moreover, as evidenced by the foregoing, neither Dabak nor Toskala ..." for the same reasons set forth above. Examiner respectfully disagrees with Applicant's assertion on Page 21, 2nd Paragraph "Therefore, Roxbergh, even assuming ...".

Roxbergh teaches demodulating, at the mobile terminal, user data from said selected first base station by combining the downlink signal of the selected first base station and the downlink signals from said other base stations not selected by said mobile terminal (Figures 2A, 2B, Column 3 lines 66 – 67, Column 4 lines 1 – 12, lines 21 – 27, in one case base station 10 is the selected base station and in another case base station 11 is the selected base station, the base stations that are not selected are the other base stations).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 1, 18, 25, and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dabak (US 6,862,275) in view of Toskala et al. (US 6,650,905).

Regarding Claim 1, Dabak teaches a transmission power control method for controlling the transmission power of downlink signals from base stations to a mobile terminal in a mobile communication system, comprising the steps of: selecting, at the mobile terminal, a first base station, said first base station transmitting user data in a downlink signal with a preferred reception quality (Column 5 lines 50 – 67, Column 6 lines 1 – 11); determining, at the mobile terminal, transmission power of downlink

signals from other base stations not selected by said mobile terminal, said other base stations transmitting user data in said downlink signals to the mobile terminal after the identification of the selected first base station is transmitted (Column 6 lines 2 – 7, lines 64 – 67, Column 7 lines 1 – 4, the base stations (504,506) are the base stations that are not selected, said base stations will resume transmitting data symbols in the subsequent data frames, which are the frames after the base station (502) is selected); sending information, from the mobile terminal to the base station, to modify the transmission power of the downlink signals of the base station based on the determined transmission power of the downlink signals from said base station (Column 5 lines 32 – 49).

Dabak does not teach transmitting, from the mobile terminal, identification of the selected first base station to the first base station and other base stations not selected by said mobile terminal, sending information from the mobile terminal to the other base stations, to modify the transmission power of the downlink signals of the base stations based on the determined transmission power of the downlink signals from said base stations not selected by said mobile terminal, wherein said other base stations terminate transmission of user data to said mobile terminal if said identification, which is transmitted by said mobile terminals is properly received at the other base stations, and said other base stations continue to transmit user data after said selecting of the first base station if said identification of the selected first base station transmitted by said mobile terminal is not properly received at the other base stations, wherein said other base stations transmit user data to said mobile terminal prior to the selecting of said first

base station, and said other base stations do not properly receive said identification of the selected first base station and continue to transmit without terminating transmission of user data.

Toskala teaches transmitting, from the mobile terminal, identification of the selected first base station to the first base station and other base stations not selected by said mobile terminal (Column 10 lines 22 – 25). Toskala further teaches sending information, from the mobile terminal to the other base stations, to modify the transmission power of the downlink signals of the base stations based on the determined transmission power of the downlink signals from said other base stations not selected by said mobile terminal (Column 10 lines 30 – 38, lines 43 – 50, See also Document 3G TS 25.214 v 3.1.1 Sections 5.2.1.1 and 5.2.1.2). Toskala further teaches wherein said other base stations terminate transmission of user data to said mobile terminal if said identification, which is transmitted by said mobile terminals is properly received at the other base stations, and said other base stations continue to transmit user data after said selecting of the first base station if said identification of the selected first base station transmitted by said mobile terminal is not properly received at the other base stations (Col. 10 lines 22 – 29, See Response To Arguments Above), wherein said other base stations transmit user data to said mobile terminal prior to the selecting of said first base station, and said other base stations do not properly receive said identification of the selected first base station and continue to transmit without terminating transmission of user data (Col. 10 lines 22 – 29, See Response To Arguments Above).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the power control method taught by Toskala in the system of Dabak for the purpose of controlling transmission power in SSDT mode as taught by Toskala.

Regarding Claim 18, Dabak teaches a mobile terminal that controls transmission power of downlink signals from base stations in a mobile communication system, comprising: base station selection means for selecting a first base station that is transmitting user data in a downlink signal with a preferred reception quality (Column 5 lines 50 – 67, Column 6 lines 1 – 11), downlink signal weight decision means for determining transmission power of downlink signals from other base stations not selected by said mobile terminal, said other base stations transmitting user data in said downlink signals to the mobile terminal after the identification of the selected first base station is transmitted (Column 6 lines 2 – 7, lines 64 – 67, Column 7 lines 1 – 4, the base stations (504,506) are the base stations that are not selected, said base stations will resume transmitting data symbols in the subsequent data frames, which are the frames after the base station (502) is selected);

Dabak does not teach transmission means for transmitting, from the mobile terminal, identification of the selected first base station to the first base station and other base stations not selected by said mobile terminal and a downlink TPC command decision means for using the downlink signals from said other base stations to decide whether transmission power of said other base stations is excessive or insufficient, and to instruct an increase or decrease of said transmission power based on the determined

transmission power of the downlink signals from said other base stations not selected by said mobile terminal, wherein said other base stations terminate transmission of user data to said mobile terminal if said identification, which is transmitted by said mobile terminals is properly received at the other base stations, and said other base stations continue to transmit user data after said selecting of the first base station if said identification of the selected first base station transmitted by said mobile terminal is not properly received at the other base stations, wherein said other base stations transmit user data to said mobile terminal prior to the selecting of said first base station, and said other base stations do not properly receive said identification of the selected first base station and continue to transmit without terminating transmission of user data.

Toskala teaches transmission means for transmitting, from the mobile terminal, identification of the selected first base station to the first base station and other base stations not selected by said mobile terminal (Column 10 lines 22 – 25) and a downlink TPC command decision means for using the downlink signals from said other base stations to decide whether transmission power of said other base stations is excessive or insufficient, and to instruct an increase or decrease of said transmission power based on the determined transmission power of the downlink signals from said other base stations not selected by said mobile terminal (Column 10 lines 30 – 38, lines 43 – 50, See also Document 3G TS 25.214 v 3.1.1 Sections 5.2.1.1 and 5.2.1.2). Toskala further teaches wherein said other base stations terminate transmission of user data to said mobile terminal if said identification, which is transmitted by said mobile terminals is properly received at the other base stations, and said other base stations continue to

transmit user data after said selecting of the first base station if said identification of the selected first base station transmitted by said mobile terminal is not properly received at the other base stations (Col. 10 lines 22 – 29, See Response To Arguments Above), wherein said other base stations transmit user data to said mobile terminal prior to the selecting of said first base station, and said other base stations do not properly receive said identification of the selected first base station and continue to transmit without terminating transmission of user data (Col. 10 lines 22 – 29, See Response To Arguments Above).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the power control method taught by Toskala in the system of Dabak for the purpose of controlling transmission power in SSDT mode as taught by Toskala.

Regarding Claims 25, 27, Dabak in view of Toskala teaches all of the claimed limitations recited in Claims 1, 18. Dabak further teaches wherein said other base stations not selected by the mobile terminal transmit user data to the mobile terminal and transmit pilot data after the identification of the selected first base station is transmitted (Column 6 lines 2 – 7, lines 64 – 67, Column 7 lines 1 – 4, the base stations (504,506) are the base stations that are not selected, said base stations will resume transmitting data symbols in the subsequent data frames, which are the frames after the base station (502) is selected). Toskala further teaches a downlink dedicated physical channel and a downlink dedicated control channel (Column 10 lines 43 – 50). Toskala further teaches wherein said other base stations not selected by the mobile terminal,

which do not properly receive said identification of the selected first base station and continue to transmit without terminating transmission of user data (Col. 10 lines 22 – 29, See Response To Arguments Above)

5. Claims 2 – 5 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dabak (US 6,862,275) in view of Toskala et al. (US 6,650,905) as applied to Claims 1, 18 above, and further in view of Mohebbi (US 6,603,971).

Regarding Claim 2, Dabak in view of Toskala teaches all of the claimed limitations recited in Claim 1. Dabak in view of Toskala does not teach estimating uplink reception quality of said other base stations.

Mohebbi teaches estimating uplink reception quality of base stations (Column 9 lines 12 – 15).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the estimation method taught by Mohebbi in the system of Dabak in view of Toskala for the purpose of reducing the backhaul load in the fixed network as taught by Mohebbi.

Regarding Claim 3, Dabak in view of Toskala and in further view of Mohebbi teaches all of the claimed limitations recited in Claim 2. Mohebbi further teaches wherein signal weights are determined for the downlink signals from said other base stations based on the uplink reception quality (Column 6 lines 63 – 67, Column 7 lines 1 – 2, Column 9 lines 12 – 15, the base station that experiences the best uplink reception quality can be the highest ranked base station, the ranking is the weighting).

Regarding Claim 4, Dabak in view of Toskala and in further view of Mohebbi teaches all of the claimed limitations recited in Claim 2. Dabak further teaches a base station that is transmitting user data to the mobile terminal after the first base station is selected (Column 6 lines 2 – 5, lines 64 – 67, Column 7 lines 1 – 4, the base stations (504,506) are the base stations that are not selected, said base stations will resume transmitting data symbols in the subsequent data frames, which are the frames after the base station (502) is selected). Toskala further teaches calculating a correlation between an increase or decrease in transmission power instructed by a transmission power control, and an increase or decrease in transmission power of a downlink signal received from a base station wherein said correlation is calculated based on a difference of the increase or decrease of the transmission power instructed and the increase or decrease in the transmission power of the downlink signal received (Column 10 lines 30 – 38, lines 43 – 50, See also Document 3G TS 25.214 v 3.1.1 Sections 5.2.1.1 and 5.2.1.2, there is a correlation between the transmission power control and the transmission power of the downlink signal because the transmit power control controls the transmission power of the downlink, in a closed loop power control system, such as the one used according to the 3G TS 25.214 v 3.1.1, there will be a difference between the actual change in transmission power and the TPC step due to the characteristics of the electronic circuits used in said closed loop method).

Regarding Claims 5, 23, Dabak in view of Toskala teaches all of the claimed limitations recited in Claims 1, 18. Toskala further teaches a signal obtained by combining downlink signals from said other base stations is used to determine whether

the transmission power of the other base stations is excessive or insufficient (Figure 11, Column 7 lines 66 – 67, Column 8 lines 1 – 32, Column 10 lines 43 – 50).

Dabak in view of Toskala does not teach weighted downlink signals.

Mohebbi teaches weighted downlink signals (Column 6 lines 63 – 67, Column 7 lines 1 – 2, the ranking is the weighting).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the weighting method taught by Mohebbi in the system of Dabak in view of Toskala for the purpose of reducing the backhaul load in the fixed network as taught by Mohebbi.

6. Claims 6, 19, 26, and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dabak (US 6,862,275) in view of Toskala et al. (US 6,650,905) and in further view of Roxbergh (US 6,553,016).

Regarding Claim 6, Dabak teaches a receiving method for demodulating user data in a downlink signal form base stations to a mobile terminal in a mobile communications system, comprising the steps of: selecting, at the mobile terminal, a first base station, said first base station transmitting user data in a downlink signal having a preferred reception quality (Column 5 lines 50 – 67, Column 6 lines 1 – 11), other base stations transmitting user data after the identification of the selected first base station is transmitted (Column 6 lines 2 – 7, lines 64 – 67, Column 7 lines 1 – 4, the base stations (504,506) are the base stations that are not selected, said base

stations will resume transmitting data symbols in the subsequent data frames, which are the frames after the base station (502) is selected).

Dabak does not teach transmitting, from the mobile terminal, identification of the selected first base station to the first base station and other base stations not selected by said mobile terminal and using the downlink signals, from said other base stations not selected by said mobile terminal to demodulate, at the mobile terminal, user data from said selected first base station by combining the downlink signal of the selected first base station and the downlink signals form said other base stations not selected by said mobile terminal, wherein said other base stations terminate transmission of user data to said mobile terminal if said identification, which is transmitted by said mobile terminals is properly received at the other base stations, and said other base stations continue to transmit user data after said selecting of the first base station if said identification of the selected first base station transmitted by said mobile terminal is not properly received at the other base stations, wherein said other base stations transmit user data to said mobile terminal prior to the selecting of said first base station, and said other base stations do not properly receive said identification of the selected first base station and continue to transmit without terminating transmission of user data.

Toskala teaches transmitting, from the mobile terminal, identification of the selected first base station to the first base station and other base stations not selected by said mobile terminal (Column 10 lines 22 – 25). Toskala further teaches wherein said other base stations terminate transmission of user data to said mobile terminal if said identification, which is transmitted by said mobile terminals is properly received at the

other base stations, and said other base stations continue to transmit user data after said selecting of the first base station if said identification of the selected first base station transmitted by said mobile terminal is not properly received at the other base stations (Col. 10 lines 22 – 29, See Response To Arguments Above), wherein said other base stations transmit user data to said mobile terminal prior to the selecting of said first base station, and said other base stations do not properly receive said identification of the selected first base station and continue to transmit without terminating transmission of user data (Col. 10 lines 22 – 29, See Response To Arguments Above).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the base station selection method taught by Toskala in the system of Dabak as an alternative means for informing wireless network entities as to what base station has been selected during SSDT mode as taught by Toskala.

Dabak in view of Toskala does not teach using the downlink signals, from said other base stations not selected by said mobile terminal to demodulate, at the mobile terminal, user data from said selected first base station by combining the downlink signal of the selected first base station and the downlink signals form said other base stations not selected by said mobile terminal.

Roxbergh teaches demodulating, at the mobile terminal, user data from said selected first base station by combining the downlink signal of the selected first base station and the downlink signals from said other base stations not selected by said mobile terminal (Figures 2A, 2B, Column 3 lines 66 – 67, Column 4 lines 1 – 12, lines

21 – 27, in one case base station 10 is the selected base station and in another case base station 11 is the selected base station, the base stations that are not selected are the other base stations).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the diversity handover method taught by Roxbergh as an alternative handoff means in the system of Dabak in view of Toskala thereby insuring a handover operation without any perceptible disturbance in the voice or data communications as taught by Roxbergh.

Regarding Claim 19, Dabak teaches a mobile terminal for receiving user data in the downlink signal from base stations in a mobile communication system, comprising: base station selecting means for selecting, a first base station that is transmitting user data in a downlink signal with a preferred downlink reception quality (Column 5 lines 50 – 67, Column 6 lines 1 – 11), downlink signal weight decision means for determining transmission power of downlink signals from other base stations not selected by said mobile terminal, said other base stations transmitting user data in said downlink signals to the mobile terminal after the identification of the selected first base station is transmitted (Column 6 lines 2 – 7, lines 64 – 67, Column 7 lines 1 – 4, the base stations (504,506) are the base stations that are not selected, said base stations will resume transmitting data symbols in the subsequent data frames, which are the frames after the base station (502) is selected);

Dabak does not teach transmission means for transmitting, from the mobile terminal, identification of the selected first base station to the first base station and other

base stations not selected by said mobile terminal and data demodulating means for using downlink signals from said other base stations to demodulate user data from said first base station by combining the downlink signal of the selected first base station and the downlink signals from said other base stations not selected by said mobile terminal, wherein said other base stations terminate transmission of user data to said mobile terminal if said identification, which is transmitted by said mobile terminals is properly received at the other base stations, and said other base stations continue to transmit user data after said selecting of the first base station if said identification of the selected first base station transmitted by said mobile terminal is not properly received at the other base stations, wherein said other base stations transmit user data to said mobile terminal prior to the selecting of said first base station, and said other base stations do not properly receive said identification of the selected first base station and continue to transmit without terminating transmission of user data.

Toskala teaches transmission means for transmitting, from the mobile terminal, identification of the selected first base station to the first base station and other base stations not selected by said mobile terminal (Column 10 lines 22 – 25). Toskala further teaches wherein said other base stations terminate transmission of user data to said mobile terminal if said identification, which is transmitted by said mobile terminals is properly received at the other base stations, and said other base stations continue to transmit user data after said selecting of the first base station if said identification of the selected first base station transmitted by said mobile terminal is not properly received at the other base stations (Col. 10 lines 22 – 29, See Response To Arguments Above),

wherein said other base stations transmit user data to said mobile terminal prior to the selecting of said first base station, and said other base stations do not properly receive said identification of the selected first base station and continue to transmit without terminating transmission of user data (Col. 10 lines 22 – 29, See Response To Arguments Above).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the base station selection method taught by Toskala in the system of Dabak as an alternative means for informing wireless network entities as to what base station has been selected during SSDT mode as taught by Toskala.

Dabak in view of Toskala does not teach data demodulating means for using downlink signals from said other base stations to demodulate user data from said first base station by combining the downlink signal of the selected first base station and the downlink signals from said other base stations not selected by said mobile terminal.

Roxbergh teaches data demodulating means for using downlink signals from said other base stations to demodulate user data from said first base station by combining the downlink signal of the selected first base station and the downlink signals from said other base stations not selected by said mobile terminal (Figures 2A, 2B, Column 3 lines 66 – 67, Column 4 lines 1 – 12, lines 21 – 27, in one case base station 10 is the selected base station and in another case base station 11 is the selected base station, the base stations that are not selected are the other base stations).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the diversity handover method taught by Roxbergh as an

alternative handoff means in the system of Dabak in view of Toskala thereby insuring a handover operation without any perceptible disturbance in the voice or data communications as taught by Roxbergh.

Regarding Claims 26, 28, Dabak in view of Toskala and in further view of Roxbergh teaches all of the claimed limitations recited in Claims 6, 19. Dabak further teaches wherein said other base stations not selected by the mobile terminal transmit user data to the mobile terminal and transmit pilot data after the identification of the selected first base station is transmitted (Column 6 lines 2 – 7, lines 64 – 67, Column 7 lines 1 – 4, the base stations (504,506) are the base stations that are not selected, said base stations will resume transmitting data symbols in the subsequent data frames, which are the frames after the base station (502) is selected). Toskala further teaches a downlink dedicated physical channel and a downlink dedicated control channel (Column 10 lines 43 – 50). Toskala further teaches wherein said other base stations not selected by the mobile terminal, which do not properly receive said identification of the selected first base station and continue to transmit without terminating transmission of user data (Col. 10 lines 22 – 29, See Response To Arguments Above)

7. Claims 7 – 10, 20 – 22, and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dabak (US 6,862,275) in view of Toskala (US 6,650,905) in view of Roxbergh (US 6,553,016), as applied to Claims 6, 19 above, and further in view of Mohebbi (US 6,603,971).

Regarding Claims 7, 20, Dabak in view of Toskala and in further view of Roxbergh teaches all of the claimed limitations recited in Claims 6, 19. Dabak in view of Toskala and in further view of Roxbergh does not teach determining estimated uplink reception quality of said other base stations.

Mohebbi teaches determining estimated uplink reception quality of base stations (Column 9 lines 12 – 15).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the estimation method taught by Mohebbi in the system of Dabak in view of Toskala and in further view of Roxbergh for the purpose of reducing the backhaul load in the fixed network as taught by Mohebbi.

Regarding Claims 8, 21, Dabak in view of Toskala in view of Roxbergh and in further view of Mohebbi teaches all of the claimed limitations recited in Claims 7, 20. Mohebbi further teaches wherein signal weights are determined for the downlink signals from said other base stations based on the uplink reception quality (Column 6 lines 63 – 67, Column 7 lines 1 – 2, Column 9 lines 12 – 15, the base station that experiences the best uplink reception quality can be the highest ranked base station, the ranking is the weighting).

Regarding Claims 9, 22, Dabak in view of Toskala in view of Roxbergh and in further view of Mohebbi teaches all of the claimed limitations recited in Claims 7, 20. Toskala further teaches calculating a correlation between an increase or decrease in transmission power instructed by a transmission power control, and an increase or decrease in transmission power of a downlink signal received from a base station that is

transmitting user data to the mobile terminal after the first base station is selected wherein said correlation is calculated based on a difference of the increase or decrease of the transmission power instructed and the increase or decrease in the transmission power of the downlink signal received (Column 10 lines 30 – 38, lines 43 – 50, See also Document 3G TS 25.214 v 3.1.1 Sections 5.2.1.1 and 5.2.1.2, there is a correlation between the transmission power control and the transmission power of the downlink signal because the transmit power control controls the transmission power of the downlink, in a closed loop power control system, such as the one used according to the 3G TS 25.214 v 3.1.1, there will be a difference between the actual change in transmission power and the TPC step due to the characteristics of the electronic circuits used in said closed loop method)

Regarding Claims 10, 24, Dabak in view of Toskala and in further view of Roxbergh teaches all of the claimed limitations recited in Claims 6, 19. Roxbergh further teaches wherein a signal obtained by combining downlink signals from the other base stations is used for demodulating the user data from said first base station (Figures 2A, 2B, Column 3 lines 66 – 67, Column 4 lines 1 – 12, lines 21 – 27, in one case base station 10 is the selected base station and in another case base station 11 is the selected base station).

Dabak in view of Toskala and in further view of Roxbergh does not teach weighted downlink signals.

Mohebbi teaches weighted downlink signals (Column 6 lines 63 – 67, Column 7 lines 1 – 2, the ranking is the weighting).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the weighting method taught by Mohebbi in the system of Dabak in view of Toskala and in further view of Roxbergh for the purpose of reducing the backhaul load in the fixed network as taught by Mohebbi.

Conclusion

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Raymond S. Dean whose telephone number is 571-272-7877. The examiner can normally be reached on Monday-Friday 6:00-2:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward F. Urban can be reached on 571-272-7899. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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July 25, 2006

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